Cytosine arabinoside, Cyclophosphamide, Thiotepa, Busulfan, Cytoxin, Taxol, Methotrexate, Cisplatin, Melphalan, Vinblastine, and Carboplatin.

- 45. (As filed) The method of claim 41 wherein the Apo-2 ligand polypeptide is selected from the group:
- (a) a polypeptide comprising amino acid residues 114-281 of Figure 1A (SEQ ID NO:1);
- (b) a polypeptide comprising a fragment or variant of (a); and
- (c) a polypeptide consisting of amino acid residues 114-281 of Figure 1A (SEQ ID NO:1).
- 46. (As filed) The method of claim 41 wherein the Apo-2 ligand polypeptide is linked to a nonproteinaceous polymer selected from the group consisting of polyethylene glycol, polypropylene glycol, and polyoxyalkylene.
- 47. (As filed) A method of treating a mammal having glioma or glioblastoma cancer, comprising administering to the mammal Apo-2 ligand polypeptide in an amount effective to induce cell death in the mammal's glioma or glioblastoma cells.
- 48. (As filed) The method of claim 47 wherein radiation therapy or chemotherapy is further administered to the mammal.
- 49. (As filed) The method of claim 48 wherein the Apo-2 ligand polypeptide and the chemotherapy are administered concurrently.
- 50. (As filed) The method of claim 48 wherein the chemotherapy is selected from the group consisting of Doxorubicin, 5-Fluorouracil, Cytosine arabinoside, Cyclophosphamide, Thiotepa, Busulfan, Cytoxin, Taxol, Methotrexate, Cisplatin, Melphalan, Vinblastine, and Carboplatin.

- 51. (As filed) The method of claim 47 wherein the Apo-2 ligand polypeptide is selected from the group:
- (a) a polypeptide comprising amino acid residues 114-281 of Figure 1A
 (SEQ ID NO:1);
- (b) a polypeptide comprising a fragment or variant of (a); and
- (c) a polypeptide consisting of amino acid residues 114-281 of Figure 1A (SEQ ID NO:1).
- 52. (As filed) The method of claim 47 wherein the Apo-2 ligand polypeptide is linked to a nonproteinaceous polymer selected from the group consisting of polyethylene glycol, polypropylene glycol, and polyoxyalkylene.
- 59. (As filed) A method of treating a mammal having neuroblastoma cancer, comprising administering to the mammal Apo-2 ligand polypeptide in an amount effective to induce cell death in the mammal's neuroblastoma cancer cells, wherein said Apo-2 ligand polypeptide is selected from the group consisting of:
- (a) a polypeptide comprising amino acid residues 114-281 of Figure 1A (SEQ ID NO:1);
- (b) a polypeptide consisting of amino acid residues 114-281 of Figure 1A (SEQ ID NO:1);
- (c) a polypeptide consisting of amino acid residues 1-281 of Figure 1A (SEQ ID NO:1);
 - (d) a polypeptide which is a fragment of (a), (b) or (c).
- 60. (As filed) The method of claim 59 wherein radiation therapy or chemotherapy is also administered to the mammal.
- 61. (As filed) The method of claim 60 wherein the Apo-2 ligand polypeptide and the chemotherapy are administered concurrently.
- 62. (As filed) The method of claim 60 wherein the Apo-2 ligand polypeptide and the chemotherapy are administered sequentially.

- 63. (As filed) The method of claim 60 wherein the chemotherapy is selected from the group consisting of Doxorubicin, 5-Fluorouracil, Cytosine arabinoside, Cyclophosphamide, Thiotepa, Busulfan, Cytoxin, Taxol, Methotrexate, Cisplatin, Melphalan, Vinblastine, and Carboplatin.
- 64. (As filed) The method of claim 59 wherein said Apo-2 ligand polypeptide consists of amino acid residues 114-281 of Figure 1A (SEQ ID NO:1).
- 65. (As filed) The method of claim 59 wherein said Apo-2 ligand polypeptide is linked to one or more nonproteinaceous polymers selected from the group consisting of polyethylene glycol, polypropylene glycol, and polyoxyalkylene.
- 66. (As filed) The method of claim 64 wherein said Apo-2 ligand polypeptide is linked to one or more nonproteinaceous polymers selected from the group consisting of polyethylene glycol, polypropylene glycol, and polyoxyalkylene.
- 67. (As filed) The method of claim 59 wherein said Apo-2 ligand polypeptide is unglycosylated.
- 68. (As filed) The method of claim 67 wherein said Apo-2 ligand polypeptide is produced in $E.\ coli.$
- 69. (As filed) A method of treating a mammal having glioma or glioblastoma cancer, comprising administering to the mammal Apo-2 ligand polypeptide in an amount effective to induce cell death in the mammal's glioma or glioblastoma cells, wherein said Apo-2 ligand polypeptide is selected from the group consisting of:
- (a) a polypeptide comprising amino acid residues 114-281 of Figure 1A (SEQ ID NO:1);
- (b) a polypeptide consisting of amino acid residues 114-281 of Figure 1A (SEQ ID NO:1);

- (c) a polypeptide consisting of amino acid residues 1-281 of Figure 1A (SEQ ID NO:1);
 - (d) a polypeptide which is a fragment of (a), (b) or (c).
- 70. (As filed) The method of claim 69 wherein radiation therapy or chemotherapy is also administered to the mammal.
- 71. (As filed) The method of claim 70 wherein the Apo-2 ligand polypeptide and the chemotherapy are administered concurrently.
- 72. (As filed) The method of claim 70 wherein the Apo-2 ligand polypeptide and the chemotherapy are administered sequentially.
- 73. (As filed) The method of claim 70 wherein the chemotherapy is selected from the group consisting of Doxorubicin, 5-Fluorouracil, Cytosine arabinoside, Cyclophosphamide, Thiotepa, Busulfan, Cytoxin, Taxol, Methotrexate, Cisplatin, Melphalan, Vinblastine, and Carboplatin.
- 74. (As filed) The method of claim 69 wherein said Apo-2 ligand polypeptide consists of amino acid residues 114-281 of Figure 1A (SEQ ID NO:1).
- 75. (As filed) The method of claim 69 wherein said Apo-2 ligand polypeptide is linked to one or more nonproteinaceous polymers selected from the group consisting of polyethylene glycol, polypropylene glycol, and polyoxyalkylene.
- 76. (As filed) The method of claim 74 wherein said Apo-2 ligand polypeptide is linked to one or more nonproteinaceous polymers selected from the group consisting of polyethylene glycol, polypropylene glycol, and polyoxyalkylene.
- 77. (As filed) The method of claim 69 wherein said Apo-2 ligand polypeptide is unglycosylated.

78. (As filed) The method of claim 77 wherein said Apo-2 ligand polypeptide is produced in $E.\ coli.$